In the Claims:

Please replace all previous Claim Listings with the following Claim Listing:

1. (Original) An application server comprising:

an ad hoc piconet interface that is configured to communicate with an ad hoc piconet using ad hoc piconet protocol;

a wide area network interface that is configured to communicate with a wide area network using wide area network protocol; and

a service manifest that is configured to determine first ad hoc piconet services that are available from the ad hoc piconet via the ad hoc piconet interface and to advertise the first ad hoc piconet services to the wide area network as first wide area network services via the wide area network interface and/or to determine second wide area network services that are available from the wide area network via the wide area network interface and to advertise the second wide area network services to the ad hoc piconet as second ad hoc piconet services via the ad hoc piconet interface.

2. (Original) An application server according to Claim 1 further comprising:

a service invocation authority that is responsive to a first service invocation for a first service that is received from a first client in the wide area network via the wide area network interface, to map the first service invocation to the ad hoc piconet protocol, to invoke the first service on the ad hoc piconet via the ad hoc piconet interface, to receive a first response from the ad hoc piconet and to provide the first response to the first client using the wide area network protocol via the wide area network interface, and/or is responsive to a second service invocation for a second service that is received from a second client in the ad hoc piconet via the ad hoc piconet interface, to map the second service invocation to the wide area network protocol, to invoke the second service on the wide area network via the wide area network interface, to receive a second response from the wide area network and to provide the second response to the second client using the ad hoc piconet protocol via the ad hoc piconet interface.

3. (Original) An application server according to Claim 1 wherein the service manifest is further configured to aggregate ad hoc piconet services that are available from multiple clients that are connected to the ad hoc piconet via the ad hoc piconet interface and to advertise the ad hoc piconet services that are aggregated to the wide area network as wide area network services via the wide area network interface.

4. (Original) An application server according to Claim 1 wherein the wide area network comprises the World Wide Web, a grid computing network and/or a universal plug and play network.

5. (Cancelled)

6. (Currently Amended) A hyper scatternet comprising:

a first ad hoc piconet;

a second ad hoc piconet; and

a wide area network;

wherein the first and second ad hoc piconets are configured to communicate with one another via the wide area network;

~~A hyper scatternet according to Claim 5~~ wherein each of the first and second ad hoc piconets comprises:

an ad hoc piconet interface that is configured to communicate with the ad hoc piconet using ad hoc piconet protocol;

a wide area network interface that is configured to communicate with the wide area network using wide area network protocol; and

a service manifest that is configured to determine first ad hoc piconet services that are available from the ad hoc piconet via the ad hoc piconet interface and to advertise the first ad hoc piconet services to the wide area network as first wide area network services via the wide area network interface and/or to determine second wide area network services that are available from the wide area network via the wide area network interface and to advertise the second wide area

network services to the ad hoc piconet as second ad hoc piconet services via the ad hoc piconet interface.

7. (Original) A hyper-scatternet according to Claim 6 wherein the service manifest is further configured to aggregate ad hoc piconet services that are available from multiple clients that are connected to the ad hoc piconet via the ad hoc piconet interface and to advertise the ad hoc piconet services that are aggregated to the wide area network as wide area network services via the wide area network interface.

8. (Original) A hyper scatternet according to Claim 6 wherein the wide area network comprises the World Wide Web, a grid computing network and/or a universal plug and play network.

9. (Original) An ad hoc piconet application server comprising:

an ad hoc piconet interface that is configured to communicate with an ad hoc piconet using an ad hoc piconet protocol;

a grid computing network interface that is configured to communicate with a grid computing network using Open Grid Services Architecture (OGSA) protocol; and

a service manifest that is configured to determine first ad hoc piconet services that are available from the ad hoc piconet via the ad hoc piconet interface and to advertise the first ad hoc piconet services to the grid computing network as first grid computing network services via the grid computing network interface and/or to determine second grid computing network services that are available from the grid computing network via the grid computing network interface and to advertise the second grid computing network services to the ad hoc piconet as second ad hoc piconet services via the ad hoc piconet interface.

10. (Original) An ad hoc piconet server according to Claim 9 further comprising:

a service invocation authority that is responsive to a first service invocation for a first service that is received from a first client in the grid computing network via the grid computing

network interface, to map the first service invocation to the ad hoc piconet protocol, to invoke the first service on the ad hoc piconet via the ad hoc piconet interface, to receive a first response from the ad hoc piconet and to provide the first response to the first client using the OGSA protocol via the grid computing network interface, and/or responsive to a second service invocation for a second service that is received from a second client in the ad hoc piconet via the ad hoc piconet interface, to map the second service invocation to the OGSA protocol, to invoke the second service on the grid computing network via the grid computing network interface, to receive a second response from the grid computing network and to provide the second response to the second client using the ad hoc piconet protocol via the ad hoc piconet interface.

11. (Original) An ad hoc piconet server according to Claim 9 wherein the service manifest is further configured to aggregate ad hoc piconet services that are available from multiple clients that are connected to the ad hoc piconet via the ad hoc piconet interface and to advertise the ad hoc piconet services that are aggregated to the grid computing network as grid computing network services via the grid computing network interface.

12. (Cancelled)

13. (Currently Amended) A method for connecting an ad hoc piconet with a wide area network comprising:

determining ad hoc piconet services that are available from the ad hoc piconet;

advertising the ad hoc piconet services to the wide area network as wide area network services;

~~A method according to Claim 12 further comprising:~~

mapping a service invocation that is received from a client in the wide area network to an ad hoc piconet protocol;

invoking the service on the ad hoc piconet;

receiving a response from the ad hoc piconet; and

providing the response to the client using a wide area network protocol.

14. (Original) A method according to Claim 13 further comprising:

aggregating ad hoc piconet services that are available from multiple clients that are connected to the ad hoc piconet; and

advertising the ad hoc piconet services that are aggregated to the wide area network as wide area network services.

15. (Currently Amended) A method according to Claim [[12]]13 wherein the wide area network comprises the World Wide Web, a grid computing network and/or a universal plug and play network.

16. (Cancelled)

17. (Currently Amended) A computer program product for connecting an ad hoc piconet with a wide area network, the computer program product comprising a computer usable storage medium having computer-readable program code embodied in the medium, the computer-readable program code comprising:

computer-readable program code that is configured to determine ad hoc piconet services that are available from the ad hoc piconet;

computer-readable program code that is configured to advertise the ad hoc piconet services to the wide area network as wide area network services

~~A computer program product according to Claim 16 further comprising:~~

computer-readable program code that is configured to map a service invocation that is received from a client in the wide area network to an ad hoc piconet protocol;

computer-readable program code that is configured to invoke the service on the ad hoc piconet;

computer-readable program code that is configured to receive a response from the ad hoc piconet; and

computer-readable program code that is configured to provide the response to the client using a wide area network protocol.

18. (Original) A computer program product according to Claim 17 further comprising:

computer-readable program code that is configured to aggregate ad hoc piconet services that are available from multiple clients that are connected to the ad hoc piconet; and

computer-readable program code that is configured to advertise the ad hoc piconet services that are aggregated to the wide area network as wide area network services.

19. (Currently Amended) A computer program product according to Claim [[16]]17 wherein the wide area network comprises the World Wide Web, a grid computing network and/or a universal plug and play network.